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Monthly Statistical Report

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OCTOBER 1983

ESTIMATED U.S. PETROLEUM BALANCE

SUMMARY

Estimated total domestic products supplied in October were 1.5% above year-ago levels, mainly as a result of a late-month surge in deliveries. This increase followed September and third quarter increases of 0.5% and 1.6%, respectively. Thus, overall, while petroleum demand is no longer deteriorating, it has not experienced quite as robust a recovery as many analysts of the industry had been expecting and the upward momentum of economic indicators had seemed to imply. In addition, demand recovery has been uneven and selective, with gasoline maintaining meaningful year-to-year increases for the past several months, distillates experiencing improvements, though to varying degrees, and demand for residual fuel oil continuing to be substantially below last year's level.

The weakness in demand has been mirrored in crude and product markets, with prices of major crudes weakening somewhat in recent weeks and prices of most major products steady or moving lower.

Crude oil production declined minimally from last October's levels. Imports, while still above last year, fell from prior-month high levels; seasonally-adjusted domestic product demand has been easing somewhat over the past couple of months while inventories stayed about the same.

Rig activity continued to increase, rising 4% on a seasonally-adjusted basis from the prior month to a level almost equal to last October's. Wells reported drilled fell 4.7% compared with last October but, seasonally adjusted, are almost 8% above the August recent-year low.

PRODUCTS SUPPLIED[1/]

The string of recent, almost-uninterrupted year-to-year advances in gasoline supplied levels continued in October with an increase of 223 MBD (3.5%). The major factors that have been bolstering gasoline consumption continued to influence demand levels—real disposable personal income rose (up 4% over the past year) and gasoline prices fell (down 2¢/gallon in October). Real gasoline prices are now almost 6¢ (5%) lower than a year ago, despite the increases in federal and state taxes of around 6¢.

Unleaded gasoline's October market share, at 55.0%, is almost three percentage points ahead of last year, roughly the same year-to-year advance that has persisted for most of the year. The impact of new car sales—up substantially in 1983 over depressed 1982 levels—on total unleaded gasoline volume has been slow and scrappage of cars using leaded gasoline has been lower than in the past. Improving fuel efficiency of new cars joining the fleet has also contributed towards holding unleaded's market share increase to a lower level than in the seventies.

Distillate supplied levels increased 51 MBD (2.0%) from a year ago. The late-month upsurge in deliveries was especially strong for distillates, adding about 130 MBD to daily levels that had prevailed during most of the month. Railroad and truck traffic in October generally maintained the substantial level of increases experienced during the past several months, and off-highway use, as a result of substantial increases in construction over last year's levels, is also likely to have risen. Some offset—about 40 MBD—was provided by weather some 5% warmer than last year. However, with October deliveries still about 120 MBD below the average of the prior three months on a deseasonalized basis, a major factor holding down distillate deliveries may have been reduced fill-up of non-primary storage, especially during the early part of the month. The attached Exhibit I, showing deseasonalized, weather-adjusted distillate supplied data, appears to support that conclusion, with the October drop interrupting the prior, generally-upward trend.

Residual fuel oil supplied fell 185 MBD (12.8%) compared with year-ago levels. Only a small portion of the deficit, perhaps 20-30 MBD, can be attributed to lower bunker fuel deliveries. It is also highly unlikely that the industrial sector, despite some continued fuel switching, contributed to the deficit; the power of the economic recovery, including a roughly 12% year-to-year increase in industrial production, would argue against that premise. It thus appears likely that, in contrast to weather-related improvement in prior months, deliveries of residual fuel oil to the electric utilities sector in October declined by about 150 MBD.

Kerosene jet fuel deliveries rose about 2.7% and are up about 3% for the year to date. "Miles flown" showed an increase of almost 5% for eight months of the year over 1982's corresponding period, and reports of substantial increases in air traf-

fic during the past two months indicate that similar levels of improvement in "miles flown" may well have continued into October. It, therefore, appears that airlines, mainly as a result of sizable expenditures for acquiring new aircraft over the past several years, are enjoying continued benefits in fuel efficiency. However, acquisition activity has, of late, been considerably curtailed because of cash flow and debt considerations.

(In millions of B/D)	OCTOBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1983	1982	% Change	1983	1982	% Change
—Total domestic products supplied	15.1	14.9	1.5	15.0	15.3	(2.1)
—Motor gasoline supplied	6.6	6.4	3.5	6.6	6.5	0.9
—Distillate fuel oil supplied	2.6	2.6	2.0	2.6	2.7	(2.8)
—Residual fuel oil supplied	1.3	1.4	(12.8)	1.4	1.7	(17.5)

SUPPLY[1/]

Total supply showed a 246 MBD drop from year-ago levels; a 364 MBD decline in total domestic supply was offset by a 118 MBD increase in imports.

Crude oil production declined slightly from September levels to a point some 30 MBD below last October's level. Lower 48 production fell more than 50 MBD from year-ago levels, but Alaskan production, helped by rising Kuparuk output, provided a partial offset. However, lower 48 production has been relatively stable over the past three years in contrast to declines averaging about 300 MBD during the seventies. Had the decline trend of the seventies not been interrupted as a result of decontrol, production levels would likely have been more than 1.1 million barrels per day below current levels.

The surge in imports that had carried import levels to a deseasonalized increase of more than 40% in September over early 1983 levels subsided, but imports still topped last October by almost 120 MBD. Product imports were responsible for the increase; crude imports were actually about 50 MBD below last October's. On a "net imports" basis, U.S. dependency rose to 30% from 28% last year, the 280 MBD fall in exports accounting for the increased rate.

The attached Exhibit II shows that U.S. oil dependency, based on "net imports", advanced from about one-third of total domestic demand in the early seventies to the 40%-50% range during the 1977-1979 period. The rate then gradually receded to the less-than-20% mark reached early this year, as exports, freed of controls in late 1981, grew substantially, demand decreased, and inventories fell to levels more reflective of the demand decline. With seasonally-adjusted inventories relatively stable in recent months and some growth in demand evident, dependency rates have gradually risen to the 25%-30% range.

Mexico continued to be the leading exporter of crude oil to the United States (8 months data), followed by the United Kingdom, Indonesia, Nigeria, and Canada, in that order. Canada is the leader for product imports, followed by Venezuela, the Virgin Islands, the Netherland Antilles, and the Bahamas.

Inventories rose a roughly-seasonal 6 million barrels during October, essentially as a result of a more than 8 million barrel increase in distillate stocks, a greater distillate stock increase than is normal for this time of the year. Distillate inventories continue to be fully adequate, especially since ample refinery capacity provides extra flexibility and crude oil stocks are still more than 50 million barrels above minimum level. Gasoline inventories represent 34 days of supply, about equal to the average experienced since the mid-seventies.

Input to crude oil distillation units, down slightly from last October's level, fell about 800,000 barrels per day from September levels. Some 300,000 barrels per day is attributable to a normal seasonal decline. The remaining 500,000 barrels per day drop may, in the main, be a reflection of light product inventories having reached adequate levels for this time of year.

The active rig count increased by 4% over the prior month on a deseasonalized basis to near year-ago levels. It has risen about 24% since its seasonally-adjusted low in April. Wells reported drilled were 4.7% percent below last October's level. The count has increased nearly 8% since its seasonally-adjusted recent-year low in August.

(In millions of B/D)	OCTOBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1983	1982	% Change	1983	1982	% Change
—Total supply	15.9	16.2	(1.5)	15.7	15.8	(0.7)
—Crude production[2/]	8.7	8.7	(0.4)	8.7	8.6	0.2
—Crude oil imports[3/4/]	3.4	3.5	(1.6)	3.1	3.3	(6.9)
—Product imports	1.8	1.6	10.6	1.6	1.6	2.9

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ Beginning with January 1977, the U.S. Department of Energy began reporting crude oil imports as of the date of importation. Previously, this data, with the exception of Canadian crude imports, was reported as of the date it was received at the refinery. This change may affect both the level of crude oil imports and crude oil stocks. API estimates of these data may, therefore, differ slightly from those of the U.S. Department of Energy.

4/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 367 million barrels as of October 31, 1983).

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

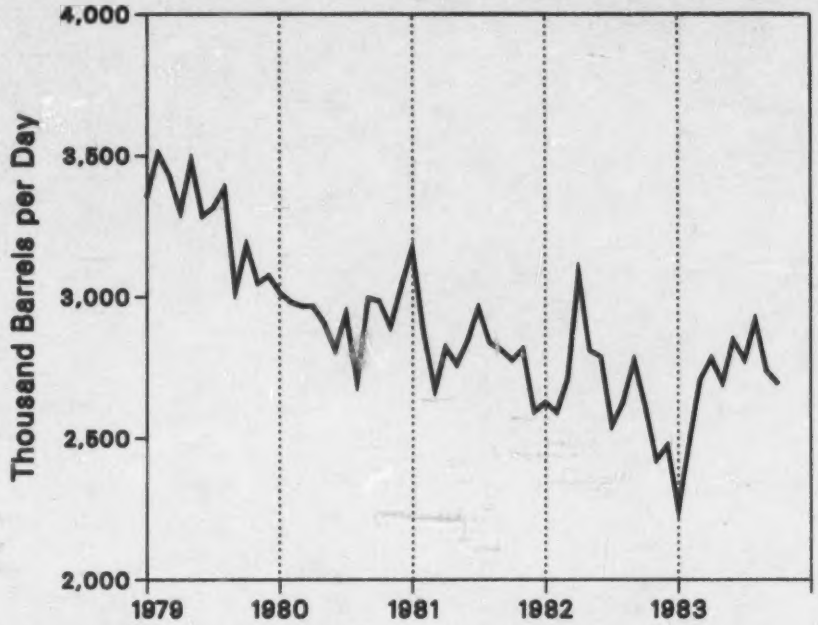
Supply/Products Supply From Primary Storage	OCTOBER			YEAR-TO-DATE		
	1983[1]	1982[2]	% Change	1983[3R]	1982[2]	% Change
Products Supplied:						
Total motor gasoline	6,614	6,391	3.5	6,594	6,535	0.9
Finished leaded motor gasoline*	2,974	3,040	(2.2)	2,992	3,138	(4.7)
Finished unleaded motor gasoline*	3,640	3,351	8.6	3,602	3,397	6.0
Naphtha-jet	158	192	(17.7)	205	208	(1.4)
Kerosine-jet	790	769	2.7	820	796	3.0
Distillate fuel oil	2,624	2,573	2.0	2,587	2,661	(2.8)
Residual fuel oil	1,262	1,447	(12.8)	1,395	1,691	(17.5)
All other oils[4]	3,790	3,753	1.0	3,540	3,686	(4.0)
Reclassified[5]	- 161	- 265	(39.2)	- 160	- 269	(40.5)
Total domestic products supplied	15,077	14,860	1.5	14,981	15,308	(2.1)
Exports	652	932	(30.0)	763	813	(6.2)
Total products supplied	15,729	15,792	(0.4)	15,744	16,121	(2.3)
Supply:						
Domestic production:						
Crude oil[6]	8,670	8,701	(0.4)	8,669	8,649	0.2
Natural gas liquids	1,518	1,530	(0.8)	1,541	1,537	0.3
Other supply[7]	529	850	(37.8)	704	653	7.8
Total domestic supply	10,717	11,081	(3.3)	10,914	10,839	0.7
Imports:	10/	10/		10/	10/	
Crude oil, total	3,399	3,454	(1.6)	3,103	3,333	(6.9)
Canadian	259	214	21.0	266	207	28.5
Other	3,140	3,240	(3.1)	2,837	3,126	(9.2)
Products, total	1,809	1,636	10.6	1,649	1,602	2.9
Residual fuel oil	746	783	(4.7)	697	773	(9.8)
Other	1,063	853	24.6	952	829	14.8
Total imports	5,208	5,090	2.3	4,752	4,935	(3.7)
Total supply	15,925	16,171	(1.5)	15,666	15,774	(0.7)
Stock change, all oils	+ 196	+ 379	XXXX	- 78	- 347	XXXX
Refinery Operations						
Input to crude oil distillation units	12,023	12,155	(1.1)	11,972	12,202	(1.9)
Operable capacity	16,306	17,221	(5.3)	16,712	17,492	(4.5)
Refinery utilization (%)[8]	73.7%	70.6%	4.4	71.6%	69.8%	2.6
Crude oil runs	11,767	11,749	0.2	11,694	11,805	(0.9)

Stocks (millions bbls.)	1983		1982[2]	% Change from ...	
	Oct. 31	Sep. 30	Oct. 31	Previous Month	Year Ago
Crude oil 10/	349.8	347.8	351.0	0.6	(0.3)
Unfinished oils	112.1	114.0	113.3	(1.7)	(1.1)
Total motor gasoline**	226.0	230.7	234.4	(2.0)	(3.6)
Finished leaded motor gasoline*	92.2	97.4	95.0	(5.3)	(2.9)
Finished unleaded motor gasoline*	94.2	93.6	97.4	0.6	(3.3)
Naphtha-jet	6.7	6.6	6.4	1.5	4.7
Kerosine-jet	36.9	34.4	34.5	7.3	7.0
Distillate fuel oil	162.9	154.4	170.1	5.5	(4.2)
Residual fuel oil	48.1	46.9	63.6	2.6	(24.4)
All other oils	202.0	203.6r/	174.5	(0.8)	15.8
Total all oils	1,144.5	1,138.4r/	1,147.8	0.5	(0.3)

1/ Based on API estimated data converted to a monthly basis.
2/ Source: U.S. Department of Energy.
3/ Source: January-August, U.S. Department of Energy, September-October, API.
4/ Includes crude losses.
5/ Beginning with January 1981, U.S. Department of Energy began using a new data collection system which encompasses a method to ascertain the amount of product reclassified during the production phase. So that there will be no double counting of these volumes, they are subtracted from total domestic products supplied.
6/ Includes lease condensate.
7/ Includes Unaccounted-for crude oil, Refinery input of other hydrocarbons, and Processing gain.
8/ Represents "Input to crude oil distillation units" as a percent of "Operable capacity."
9/ Derived by interpolating API weekly stocks data.
10/ Data do not include oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR.
R/ Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.

EXHIBIT I

SEASONALLY AND WEATHER ADJUSTED DISTILLATE SUPPLIED



Sources: Department of Energy, American Petroleum Institute

EXHIBIT II

U.S. NET DEPENDENCE ON IMPORTS

NET IMPORTS DIVIDED BY TOTAL PRODUCT SUPPLIED

SOURCE: DEPT. OF ENERGY AND API